WHAT IS CLAIMED IS:

1. A data communication apparatus that exchanges a voice packet via an IP network, the voice packet storing non-voice data, the apparatus comprising:

a memory that stores data obtained from a received voice packet;

a data processor that performs a predetermined process on data, the data being sequentially output from said memory; and

a controller that adjusts an operation timing of an output process from said memory and a data process of said data processor, according to a data amount within said memory.

2. The data communication apparatus according to claim 1, wherein said data processor comprising:

a codec section that decodes the data in the received voice packet; and

a modem that demodulates PCM data that is output from said codec section.

3. The data communication apparatus according to claim 2, wherein said controller adjusts the operation timing using a standard clock that mutually synchronizes both an operation of said codec section and an operation of said modem.

4. The data communication apparatus according to claim 1, further comprising:

a detector that detects a state where the data amount stored in said memory exceeds a predetermine upper limit, and wherein said controller accelerates the operation timing of the output process from said memory and the data process of said data processor, when said detector detects the state.

5. The data communication apparatus according to claim 4, wherein the upper limit is set based on a fluctuation of packet arrival intervals, the fluctuation being caused by a delay within the IP network.

6. The data communication apparatus according to claim 1, further comprising:

a detector that detects a state where the data amount stored in said memory falls

short of a predetermine lower limit, and wherein said controller decelerates the operation timing of the output process from said memory and the data process of said data processor, when said detector detects the state.

7. The data communication apparatus according to claim 1, wherein the data stored in the voice packet is facsimile data.

8. A data communication method for exchanging a voice packet via an IP network, the voice packet storing non-voice data, the method comprising:

storing data obtained from a received voice packet into a memory;

performing a predetermined process on data that is sequentially output from a memory; and

adjusting an operation timing of an output process from the memory and a data process of a data processor, according to a data amount within the memory.

9. The data communication method according to claim 8, further comprising:

detecting a state where the data amount stored in the memory exceeds a predetermine upper limit; and

accelerating the operation timing of the output process from the memory and the data process of the data processor, when the state is detected.

10. The data communication method according to claim 8, further comprising:

detecting a state where the data amount stored in the memory falls short of a predetermine lower limit; and

decelerating the operation timing of the output process from the memory and the data process of said data processor, when the state is detected.